

[0082] In a yet further embodiment (shown in **FIG. 3**.) the step of altering the matt surface to provide the front screen (2) with an optically smooth surface includes removing the existing material having the matt surface and replacing same with a material having an optically smooth surface. The matt surface (7) of a polariser (8) and protective laminate (9) of existing LCD screen (as shown in **FIGS. 1 and 2**) of the type predominantly produced by large volume LCD screen manufacturers is replaced by an LCD screen (2) having an optically smooth (i.e., non-matt) outer surface.

[0083] In the embodiment shown in **FIG. 3**, the optically smooth outer surface is formed by the surface of the protective coating (9) of a polariser (8). Such operations may only be performed by relatively specialised and commensurately expensive companies. Therefore, unless further operations (unrelated to the present invention) are required to be performed on the LCD screen, this technique is less desirable than the first or second embodiments described above.

[0084] It should be seen that the present invention provides an improved display technology and encompasses a method of converting existing screens, the converted screen itself, and other technology which incorporates the converted screen.

[0085] Aspects of the present invention have been described by way of example only and it should be appreciated that modifications and additions may be made thereto without departing from the scope of the present invention.

1. A method of converting a matt surface of a front screen of a multi focal-plane display configured with two or more optically overlapping screens, characterised by the step of altering the matt surface to provide the front screen with a non-diffuse optically smooth surface.

2. The method as claimed in claim 1, wherein at least one said screen is an LCD screen.

3. The method as claimed in claim 17, wherein the matt surface is formed on a polariser film.

4. The method as claimed in claim 3, wherein the polarising film is formed from a protective transparent layer encapsulating a polarising layer.

5. The method as claimed in claim 1, wherein the step of altering the matt surface to provide the front screen with a non-diffuse optically smooth surface includes applying an at least partially transparent coating to the matt surface.

6. The method as claimed in claim 5, wherein the coating is applied as a flowable substance and subsequently hardened to form a non-diffuse optically flat outer surface.

7. The method as claimed in claim 5, wherein the coating is of a material with substantially the same refractive index as the material having the matt surface.

8. The method as claimed in claim 5, wherein the coating flows over, around and/or inside any optical irregularities, distortions, protrusions, or discontinuities of said matt surface to a sufficient thickness to form a substantially optically flat non-diffuse outer surface.

9. The method as claimed in claim 5, wherein the coating is applied by a technique selected from the group including painting, spraying, sputtering, vapour deposition, slurry coating, chemical deposition, screen printing or roll coating.

10. The method as claimed in claim 1, wherein the step of altering the matt surface to provide the front screen with an optically smooth surface includes attaching a non-diffuse optically smooth transparent film to the matt surface by a transparent adhesive interposed between the film and the matt surface.

11. The method as claimed in claim 10, wherein the adhesive is initially applied to a lower surface of the film.

12. The method as claimed in claim 10, wherein the adhesive may be applied to the matt surface independently from the film.

13. The method as claimed in claim 10, wherein the said adhesive and film are of materials having substantially the same refractive index as the material having the matt surface.

14. The method as claimed in claim 10, wherein the adhesive is capable of flowing over, around and/or inside any optical irregularities, distortions, protrusions, or discontinuities of said matt surface to a sufficient thickness to form a substantially optically flat non-diffuse outer surface.

15. The method as claimed in claim 1, wherein the step of altering the matt surface to provide the front screen with an optically smooth surface includes removing the existing material having the matt surface and replacing same with a material having a non-diffuse optically smooth surface.

16. A display produced by the method as claimed in any one of the above claims.

17. A method substantially as hereinbefore described, with reference to, and as shown in any one of the drawings.

18. A display substantially as hereinbefore described, with reference to, and as shown in any one of the drawings

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